# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

CEASE AND DESIST ORDER NO. R7-2007-0056
REQUIRING SALTON COMMUNITY SERVICES DISTRICT
SALTON CITY WASTEWATER TREATMENT FACILITY
IMPERIAL COUNTY
TO CEASE AND DESIST FROM
DISCHARGING WASTE CONTRARY TO REQUIREMENTS

The California Regional Water Quality Control Board, Colorado River Basin Region (Regional Board) finds that:

- Salton Community Services District (Discharger) owns and operates the wastewater treatment facility (WWTF) and sewage collection system serving Salton City, an unincorporated community. The WWTF is located on the west shore of the Salton Sea, in the SE ¼ of Section 21, T10S, R10E, SBB&M.
- 2. Coachella Valley Water District (CVWD) provides domestic water for Salton City. The average total dissolved solids (TDS) concentration in the source water during 2005 was reported as 880 mg/l by CVWD.
- 3. Wastewater into the WWTF consists of domestic wastes from the community. The Discharger operates 27 sewer lift stations as part of its collection system. The WWTF consists of a six, unlined, treatment and evaporation/percolation ponds. Currently, two of the ponds are aerated. The other ponds are used for wastewater polishing and disposal by evaporation/percolation.
- 4. Groundwater in the area of the WWTF is about 5 to 15 feet below ground surface.
- 5. Surface drainage in the area of the WWTF is towards the Salton Sea, a water of the United States. A wash tributary to the Salton Sea runs along the eastern property boundary.
- 6. The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan), as amended to date, designates the beneficial uses of the ground and surface waters in this Region.
- 7. The discharge from the WWTF is taking place in the West Salton Sea Hydrologic Unit. The designated beneficial uses of ground waters in the West Salton Sea Hydrologic Unit are Municipal supply (MUN) and Agricultural supply (AGR). However, the total dissolved solids concentration of groundwater in the area of the WWTF is reportedly in the order of 7,000 mg/L, and therefore may not be suitable for municipal, domestic, or agricultural supply.
- 8. The beneficial uses of the Salton Sea are shown below: contact and non-contact water recreation (REC I and REC II), wildlife habitat (WILD); preservation of rare, threatened, or endangered species (RARE); aquaculture operations (AQUA), warm freshwater habitat (WARM); and industrial supply (IND).

- 9. The Discharger reports that a large percentage of community homes are occupied seasonally by travelers, retirees, and agricultural workers—primarily during the fall and winter months (late October to early May). Therefore, community population fluctuates seasonally from approximately an average of 750 to a high of 2,000 residents. However, during the last several years, there has been a shift to year-round occupancy of the residences.
- 10. The Discharger's WWTF has been plagued by recurring disposal problems since 1999. A Regional Board investigation of a June 22, 1999 complaint against the Discharger documented that partially treated wastewater from the WWTF was surfacing outside the WWTF, in the wash tributary to the Salton Sea. A November 10, 1999 Regional Board inspection report also notes the standing wastewater in an area immediately adjacent to the Discharger's ponds.
- 11. To address the increased flows into the WWTF and the disposal problems it was experiencing in 2000, the Discharger submitted a technical report, dated May 15, 2000, and titled "Assessment of Pond Capacity Salton City Wastewater Treatment Plant", in support of an increase in the volume of wastes treated and discharged from its WWTF. The report stated that the actual treatment and disposal capacity of the WWTF was in the order of 0.20 MGD.
- Based on the report cited in Finding No. 11, above, the Regional Board adopted WDRs Order No. 00-094, which provided for the requested increase in flow to 0.20 MGD and rescinded WDRs Order No. 98-018.
- 13. The current WDRs Order for the Discharger is WDRs Order No. 00-094, which states, in relevant part, that:
  - "[A.1] The 30-day average daily dry-weather flow to the [WWTF] shall not exceed 0.20 MGD.
  - "[B.1] The direct discharge of any wastewater from the [WWTF] to any surface waters or surface drainage courses is prohibited.
  - "[B.2] Bypass or overflow of untreated or partially treated waste is prohibited.
  - "[B.3] Discharge of treated wastewater at a location or in a manner different from that described in Findings No. 2 and 3, above, is prohibited.
  - "[B.4] The Discharger shall not accept waste in excess of the design treatment capacity of the disposal system.
  - "[C.1] The treatment or disposal of wastes at this [WWTF] shall not cause pollution or nuisance as defined in Section 13050 of Division 7 of the California Water Code.
  - "[C.6] The discharge shall not cause degradation of any beneficial use of surface or ground water.

- "[D.1] The discharger shall comply with 'Monitoring and Reporting Program No. 00-094', and future revisions thereto, as specified by the Regional Board's Executive Officer.
- "[D.3] Prior to any modifications in this [WWTF], which would result in material change in the quality or quantity of wastewater treated or discharged, or any material change in the location of discharge, the Discharger shall report all pertinent information in writing to the Regional Board and obtain revised requirements before any modifications are implemented.
- '[D.10] The discharger shall, at all times, properly operate and maintain all systems and components of collection, treatment and control... installed or used by the discharger to achieve compliance with the conditions of this Board Order...
- "[D.22] Ponds shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, ancillary inflow, and infiltration..."
- 14. Monitoring and Reporting Program (MRP) No. 00-094 requires, in relevant part, that the Discharger measure on a daily basis and report on a monthly basis the flow from the WWTF. Further, it requires that the Discharger calibrate its WWTF flow metering instrumentation and equipment in a timely manner, documented this activity, and reported it annually to the Regional Board.

#### **Unreliable WWTF System Components/Controls**

- 15. Properly operated and maintained flow metering instrumentation is essential to determine compliance with the terms of WDRs Order No. 00-094, including determining compliance with Effluent Limitation No. A.1 (flow limit), Prohibition No. B.4 (accepting wastes in excess of WWTF capacity), Provision D.1 (compliance with MRP No. 00-094), and Provision D.22 (pond disposal capacity), cited above in Finding No. 13.
- 16. The WWTF lacks a flow meter to determine its influent or effluent flows. The Discharger has been calculating the flows into WWTF from the daily pumping rates of its Sewage Lift Station Nos. 22 and No. 24. Since 2001, it has yet to report to the Regional Board the last time that pumps were calibrated and/or their resulting measurements adjusted to account for pumping rate accuracy. In 2003, the Discharger purchased magnetic flow meters to determine WWTF flows, but it has yet to ensure they operate properly. It reported during a December 8, 2003 inspection that the meter manufacturer had not provided training to WWTF staff on how to calibrate the meters. Because the Discharger has failed to calibrate its metering instrumentation and report accordingly, it has been in chronic violation of Provision Nos. D.1 (compliance with MRP No. 00-094) and D.10 (proper O&M) of WDRs Order 00-094, cited above in Finding No. 13.

- 17. The WWTF 30-day average daily flow in each of the SMRs for February through November 2006 were reported by the Discharger as "0.151" MGD. The SMRs also show that daily flow entries in each one of those SMRs are identical, which is statistically impossible considering the source of the flow. Consequently, these SMRs are technically deficient, which also constitutes a violation of Provision No. D.1 (compliance with MRP No.00-094) of WDRs Order No. 00-094, cited above in Finding No. 13.
- 18. The Discharger's SMRs for November 2006 through February 2007 show that the calculated 30-day average daily WWTF flows ranged from 0.201 to 0.220 MGD, in violation of Effluent Limitation A.1 (flow limit), Prohibition No. B.4 (accepting wastes in excess of capacity), and Provision D.22 (lack of pond disposal capacity) of WDRs Order No. 00-094, cited above in Finding No. 13.

#### Lack of WWTF Capacity and Other Problems

- 19. A January 24, 2002 Regional Board inspection found standing wastewater (i.e., surfacing wastewater) on the eastern side of the property. This constitutes a violation of Prohibition Nos. B.2 (bypass) and B.3 (unauthorized discharge location/manner of discharge) of WDRs Order No. 00-094, cited above in Finding No. 13. During the last year, wastewater treatment and disposal problems at the WWTF have worsened.
- 20. On March 22, 2007, Regional Board staff conducted an inspection of the WWTF. The inspector found that:
  - a. Only two of the six ponds had aerators, and that all of the ponds were at capacity, with the minimum 2-foot freeboard, in threatened violation of Provision No. D.10 (lack of proper O&M);
  - b. Partially treated wastewater from the WWTF was again surfacing and remaining stagnant in areas outside the WWTF property boundaries, in violation of Prohibition Nos. B.2 (bypassing partially treated wastewater), B.3 (unauthorized discharge location) and Provision No. D.22 (lack of pond disposal capacity); and threatened violation of Discharge Specification No. C.1 (threatened nuisance because stagnant wastewater is known to harbor and/or enhance the formation of mosquitoes); and
  - c. The Discharger was also discharging wastewater from the WWTF into an old "off-site pond." The pond is within the property boundaries of the WWTF, but not approved as a disposal pond under WDRs Order No. 00-094. Therefore, the discharge to the off-site pond also violates Prohibition No. B.3 (unauthorized discharge location) and Provision No. D.3 (making WWTF modification without Regional Board prior approval) of Order No. 00-094, cited above in Finding No. 13.
- 21. On March 29, 2007, Regional Board staff again inspected the WWTF and found that:
  - a. Partially treated wastewater was still surfacing outside the WWTF, in violation of Prohibition Nos. B.2 (bypassing partially treated wastewater), B.3 (unauthorized discharge location) and Provision No. D.22 (lack of pond disposal capacity);

- b. A mobile home trailer was parked in an area approximately 200 feet west from the WWTF, and that area was damp and had some standing wastewater in threatened violation of Discharge Specification No. C.1 (nuisance odors and vectors); and
- c. There was standing wastewater also in the wash tributary to the Salton Sea, also in threatened violation of Prohibition No. B.1 (direct discharge to surface water) and Discharge Specification Nos. C.1 (threatened vector conditions) and C.6 (threatened degradation of Salton Sea) of Order No. 00-094, cited above in Finding No. 13.
- 22. During the last several years, the Discharger has connected approximately 250 new homes to its sewer collection system. Because of the lack of WWTF metering instrumentation, the Discharger is using a projected population density per home of 2.1 and an average wastewater demand of 210 gallons per day (gpd) per resident, for WWTF design purposes. Using these design parameters, current seasonal peak flows into the WWTF could be as high as 0.420 MGD (based on 2000 residents), which may explain some of the WWTF treatment and disposal problems.
- 23. To address the increases in flow and problems at the WWTF, the Discharger submitted a Report of Waste Discharge (ROWD), dated February 27, 2007, requesting new Waste Discharge Requirements (WDRs) for a proposed new WWTF for Salton City. The proposed WWTF would consist of headworks, two aerated ponds, two clarifying ponds, and four evaporation/percolation ponds with a design treatment and disposal capacity of 0.50 MGD. The estimated cost for the new WWTF and associated infrastructure is approximately \$2,700,000.
- 24. On April 2, 2007, the Discharger informed the Regional Board that the disposal problems noted in Finding Nos. 20 and 21, above, were due to a combination of things: increased population growth in Salton City (over 250 new sewer connections during the last couple of years), lower than expected temperatures which decrease pond evaporation rates, and shallow groundwater conditions at the WWTF.
- 25. On April 10, 2007, and pursuant to CWC Section 13267, the Regional Board ordered the Discharger to provide monthly status reports on the WWTF problems and steps taken by the Discharger to mitigate the problems. It also advice the Discharger to coordinate with the Imperial County Vector Control District to mitigate potential vectors due to the standing wastewater/seepage, and if necessary restrict additional connections to its sewage collection system. The Regional Board also cited the Discharger for the violations and threatened violations of WDRs Order No. 00-094 discussed above, and it informed the Discharger that the ROWD for the new WWTF was incomplete.
- 26. The Discharger has been in violation of Effluent Limitation No. A.1 (flow limit), Prohibition No. B.2 (bypass), Prohibition No. B.3 (unauthorized discharge location/manner of discharge), Prohibition No. B.4 (accepting wastes in excess of capacity), Provision No. D.3 (making WWTF modification without Regional Board prior approval), and Provision D.22 (lack of pond disposal capacity) of WDRs Order No. 00-094. It is also in threatened violation of Prohibition B.1 (direct discharge to surface water), Discharge Specification C.1 (threatened nuisance odors and vectors), Discharge Specification C.6 (threatened

degradation of surface waters), and Provision No. D.10 (proper O&M) of WDRs Order No. 00-094, cited above in Finding No. 13.

27. In addition to the foregoing, the Discharger's self-monitoring data show that the total dissolved solids (TDS) concentration in the effluent from the WWTF has ranged from 2,640 to 11,726 mg/L, with a median concentration of 5,372 mg/L, during the last six years. Considering the TDS of the source water for the community (approximately 820 to 880 mg/L), the data indicate that the sewage collection system suffers from significant infiltration of shallow saline groundwater. This not only exacerbates the disposal problems at the WWTF, but could also affect the treatment capacity of the WWTF.

## Legal, Technical, and Other Considerations

28. Section 13301 of the CWC states, in relevant part, that:

"When a regional board finds that a discharge of waste is taking place, or threatening to take place, in violation of requirements or discharge prohibitions prescribed by the regional board or the state board, the board may issue an order to cease and desist and direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventive action. In the event of an existing or threatened violation of WDRs in the operation of a community sewer system, cease and desist orders may restrict or prohibit the volume, type, or concentration of waste that might be added to that system by dischargers who did not discharge into the system prior to the issuance of the cease and desist order."

29. Section 13267(b) of the California Water Code states:

"In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports."

30. The Discharger owns and operates the treatment and disposal facilities subject to this Order. Technical reports, including workplans, are necessary to bring on-site discharges into full compliance with the WDRs Order No. 00-094 and with this Order.

- 31. The Discharger cannot achieve immediate compliance with WDRs Board Order No. 00-094. As a result, discharges of waste are taking place in violation and threatened violation of Order No. 00-094. Therefore, this Cease and Desist Order (Order) requires the Discharger to undertake certain actions, including short-term actions, to prevent more violations and mitigate on-going violations of WDRs Order No. 00-094, particularly measures to stop on-going discharges outside the WWTF and threatened nuisance vector conditions. It also requires the Discharger to take long-term measures to ensure consistent compliance with the Board requirements. It is also necessary for the Discharger to investigate and correct to the extent necessary the infiltration problems noted in Finding No. 27. above.
- 32. As of April 25, 2007, a total of 309 new houses are built and connected to the Discharger's sewer collection system, but these houses are not occupied yet. Also, the Discharger has approved 18 new sewer connections to its collection system from houses that either are under construction or have been approved for construction by Imperial County. This brings the total number of additional sewer connections to the Discharger's collection system to 327, which have a projected wastewater flow contribution of approximately 81,750 gallons per day (using 250 gallon per day/dwelling unit), which under normal circumstances could increase the number, frequency, and severity of the violations of WDRs Order No. 00-094.
- 33. Sales of houses (new and used) in Salton City have dropped as much as 50% during the last year. As the summer months approach, the population in Salton City decreases. Regional Board analysis of the available WWTF flow data indicates that there should be a corresponding seasonal decrease in flow into the WWTF of approximately 20,000-30,000 gpd, which may mitigate the WWTF problems from May through September 2007.
- 34. Since the issuance of the CWC Section 13267 Order on April 10, 2007, the Discharger has been taking steps to prevent on-going discharges of treated, partially treated, and untreated wastewater in violation of WDRs Order No. 00-094, including adopting a self-imposed ban on new sewer connections beyond the ones that it has already approved. The Discharger adopted the ban on 4/17/2007 (Salton Community Services District Resolution No. 2007-4-3), and it reports that its ban is in effect until the new WWTF is operational.
- 35. The Discharger reported on April 20, 2007, that it could build several interim disposal ponds at the site for its new WWTF, within several months following approval by the Regional Board, and haul treated wastewater from the existing treatment ponds to the interim disposal ponds, in case the projected decrease in flow does not materialize. It is also certifying compliance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et. seq.) for its new WWTF by May 24, 2007; and requesting bids for the project immediately thereafter.
- 36. The current housing market conditions for the area, the interim measures the Discharger is taking to deal with disposal problems and prevent nuisances, the quality of groundwater in the area of the WWTF, the Discharger's financial assurances to build interim disposal facilities and build its new WWTF are significant factors the Regional Board has considered in determining that including a sewer connection ban in this Order is not in the best interest of the State at this time. Nevertheless, many of the violations cited in this Order could have been prevented, have resulted in expenditures of limited staff resources, and have resulted

in discharges to surface waters and threatened nuisance vector conditions. Therefore, Regional Board staff is also presently issuing an Administrative Civil Liability Complaint against the Discharger.

### **Public Participation and Compliance with CEQA**

- 37. The Board has notified the Discharger and all known interested agencies and persons of its intent to issue this Order and has provided them with an opportunity for a public meeting and an opportunity to submit comments.
- 38. The Board, in a public meeting, heard and considered all comments pertaining to this Order.
- 39. This enforcement action is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21000 et seq.), in accordance with Section 15321 ("Enforcement Actions by Regulatory Agencies"), Title 14, California Code of Regulations.

IT IS HEREBY ORDERED, that in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, the Discharger shall:

- 1. Cease and desist discharging wastes in violation of WDRs and implement corrective actions in accordance with the tasks and time schedules specified below.
- 2. Interim Wastewater Treatment and Disposal Capacity—The Discharger shall:
  - a. By July 30, 2007, begin construction of additional treatment and disposal ponds to treat and properly dispose of a minimum design flow of 25,000 gallons per day. The water balance for interim treatment and disposal system shall be based on the design flow, ancillary inflow/infiltration, projected percolation rates for the site (taking into account mounding conditions), total annual precipitation with a 100-year return frequency distributed monthly according to historic rainfall patterns for the area, and evaporation rates for the area.
  - b. **By September 15, 2007**, the Discharger shall complete construction of the proposed interim treatment and disposal system described in Finding No. 35, above; and
  - c. **By September 30, 2007**, submit a technical report in the form of engineering certification and as-built plans and specifications showing that it has complied with Item Nos. 2 and 3, above.
- 3. Vector Control Plan—By June 30, 2007, the Discharger shall develop and implement a contingency plan to effectively deal with vector conditions that may result: (a) in the area of the existing WWTF due the current disposal problems at the WWTF; (b) in the area of the interim disposal facilities described in Item No. 2, above, due to the discharge of wastewater to the interim facilities; and (c) in the area of the existing WWTF when Discharger begins discharging wastewater into its new WWTF. The plan shall describe the monitoring procedures, including inspection frequency, to determine the potential for

formation, presence, and enhancement of vectors; and the vector control techniques the Discharger will implement to deal with them. The plan shall be developed in close consultation with and should be approved by the Imperial County Environmental Health Department.

- 4. Plan for Decommissioning Existing WWTF—By July 30, 2007, the Discharger shall submit a technical report in the form of workplan to properly abandon and decommission the existing WWTF. The plan shall describe proposed milestones and time schedule for implementation, including proposed measures to properly dispose off WWTF sludge, contaminated soils, equipment, and associated infrastructure.
- 5. Study and Control of Inflow/Infiltration—By July 15, 2007, the Discharger shall submit a technical report with a time schedule for implementation to:
  - d. Investigate the sources and determine the amount of inflow/infiltration (I/I) they contribute to the Salton City sewer collection system;
  - e. Determine how the amount of I/I in the collection system compares to the I/I that is acceptable under standard sanitary engineering practices in California;
  - f. Determine the amount of overload the I/I exerts on the existing WWTF and the amount it would exert on the proposed new WWTF;
  - g. Take proposed measures to reduce the I/I to what is acceptable under standard sanitary engineering practices in California; and
  - h. Complete measures to reduce the I/I accordingly.
- 6. **New WWTF**—The Discharger shall complete construction of its new WWTF in accordance with the following task and milestones:

	Task	Completion Date	Report Due
a.	Award Bid for construction of new WWTF	Oct 15, 2007	Oct 30, 2007
b.	Begin construction of new WWTF	Nov 15, 2007	Nov 30, 2007
C.	Submit monthly status and progress report on construction of new WWTF		Sep 15, 2007 Oct 15, 2007 Nov 15, 2007 Dec 15, 2007 Mar 15, 2007
d.	Complete construction of new WWTF	Apr 30, 2008	May 15, 2008
e.	Achieve full compliance with WDRs	Apr 30, 2008	May 15, 2008

- 7. The inclusion of the above time schedules does not authorize any direct or indirect discharge to surface water.
- 8. Plans and schedules are subject to the prior approval of the Executive Officer. Failure to comply with the terms of this Order may result in administrative civil liability of up to \$5000 per day for each violation, pursuant to Sections 13350 of the California Water Code.

- 9. In accordance with California Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of California registered professionals (i.e., civil engineer, engineering geologist, geologist, etc.) competent and proficient in the fields pertinent to the required activities. All technical reports specified herein that contain workplans, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall contain a statement of qualifications of the responsible licensed professional(s) as well as the professional's signature and/or stamp of the seal.
- 10. If, in the opinion of the Executive Officer, the Discharger violates this Order, allows the magnitude or frequency of violations to increase, or fails to immediately implement feasible interim corrective measures, the Executive Officer shall bring this Order before the Regional Board for revision and consideration of a connection ban. The Executive Officer may also apply to the Attorney General for judicial enforcement or may issue a complaint for Administrative Civil Liability.

I, Robert Perdue, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on June 26, 2007.

ROBERT PERDUE, Executive Officer